THERE IS CLAIMED:

1. A method of controlling polarization mode dispersion of an optical fiber during fiber drawing, said method comprises the steps of:
   - applying torsion to said fiber by displacement of said fiber relative to a member,
   - capturing at least one image of said fiber and said member,
   - analyzing said image to determine the position of said fiber relative to said member, and
   - calculating said torsion applied to said fiber from said determined position.
2. The method claimed in claim 1 wherein said step of applying torsion to said fiber comprises the displacement in rotation of said member relative to said fiber and said step of analyzing said at least one image comprises determining the angular position of said fiber relative to said member.
3. The method claimed in claim 2 wherein said step of applying torsion to said fiber comprises periodic movement of said member.
4. The method claimed in claim 3 wherein said step of capturing at least one image of said fiber and said member is executed periodically, with a period different from that of said movement of said member.
5. The method claimed in claim 1 or claim 4 wherein said step of calculating said torsion applied to said fiber comprises calculating the number of turns through which said fiber rolls on said member.
6. The method claimed in claim 5 wherein said step of calculating said torsion applied to said fiber comprises calculating the mean position of said fiber by integrating its positions.
7. An optical fiber drawing installation comprising:
   - a movable member, movement of said member applying torsion to said fiber,
   - an image sensor adapted to captures images of said fiber and said member, and
   - an analyzer circuit for analyzing captured images, determining the position of said fiber relative to said member and calculating said torsion applied to said fiber from the position determined in this way.
8. The installation claimed in claim 7 wherein said member is a pulley

subjected to an oscillatory movement.

9. The installation claimed in claim 8 wherein said image sensor is adapted to capture an image of said fiber and said pulley in the vicinity of the median point of contact between said fiber and said pulley.